

**SMALL INDUSTRIES DEVELOPEMNT BANK OF INDIA**



SIDBI-WRAPPER UDYAM API

VERSION 1.1

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## Token API:

**Description:** This API is used to generate the JWT token by using username and password to validate the users.

**Url:** <https://uatpartner.sidbi.in/user/auth/generate-token>

## API Request:

```
{
  "utilsDtls": {
    "sessionKey": "XDSMbK9fGrpjDpd5nyvt2Ff94WDdpcA+EVMntVhS1a9Aab3UBr8Md/oGaq7R0lvnF7EbqqQ
G7JHXfFTfejiBrw5yExqPV+KJhrzyv8A14wgShyV1bQGue6XnIAVU9KUkIvy3b3w9+ktgkV6oRq/NPYWZ8q135fpRWEyw2
i8TQzhrLeqhV0JuZJ2TYCy7DzT7L75j/1VbRmpualrf9l+FJ1ga7kXoK6KNqL0SVkAI01hkFcOEHgC/pp5y81Su1MMfuOz
xTenhbRtg6EhD/+8gSa6lDXWzq3Ca0jxNjBZ0msZCkgiSTXlEnWF1PYDytRBT+kt8x7UBcsdrd0nPLNLTAQ==",
    "version": "1.0",
    "timestamp": "28-02-2024 06:35:09",
    "requestId": "54406ebf-eedd-4e68-9926-4ba77e6efbcd"
  },
  "payload": "camaQ9AaympxNnV99ccdVHGkmlruG0sW77RT+Qy4tX+PY7mP5cif0DwT+uPYibxc6nSkBljnCLgE7L
ggqy5PzdWZeHfO02sBT7k3uyeI8YCiZLULV8DUcw9q8H4e0SgZuWxNABTiu4vA/A10g8S+3Mfe2jE5"
}
```

## Request without encryption:

```
{
  "username": "username",
  "password": "password"
}
```

## API Response:

```
{
  "utilsDtls": {
    "sessionKey": "s8AcWHcvPHI2vLF7L16ij4YJZ/4VoByajDKkIksMg/F91aUdtZ3mxVzaL0+RI/QS1McE8Fj
FwxhqSqiYjPCS0Jqi20bpsfjQbKnn07aoYDrxMSMRC+rd0JBWvyv8DRbGscMdoImXPtAShZfMQl63d3nsKgyzIH/T+3oY4
z4zQpzMbxRY/3S9o0A37j0GS8oUiH3goIg9y8kLoiNL+JBQtXPHJtW0BaV2nAEkGxeLUWd/rp0biDhmWmoFRSEcxNcjs2C
mcmCtpOEMSQTxRNoLIbkG3c6kez0W0aqcvIADgie1nRlGfyWSXNhn5k42cnQ5qEqNU0PH6/9cJFdx0cw9yA==",
    "version": "1.0",
    "timestamp": "01-03-2024 10:26:16",
    "requestId": "54406ebf-eedd-4e68-9926-4ba77e6efbcd"
  },
  "statusCode": "1000",
  "statusMsg": "Success",
  "payload": "xseatqw0tum4Sr30TQmyQp66iHHnf+hn4jb2IM1lh4ndXM02VYVW6CEM1J7cYHvypheDdHsmDw+9YH
6zrEU2MKk0FStRMTEeTWMLHJUJ74/Li957gauwMD/xraYKRqA9sEMBeRsa/h6igBNcZdv78WZ3ByOqm3iupTOubecbXSfF
"
```

```
r4/ffWgpZSVW9KKyeBB6gyqKBpTR501ocoUzQGbd1QNrqOUWIMlKyX4aNhdKqsFNgiFuYfidyoQqghnokHoE6L8zWHk0Ew  
TMj3eKMw0YcvcocGN60FidgdJUK+2ftKxaqcEa56Xe+hGCLXzmLxEZzNlw2AzCk5FeSEM0FucGpzBbpxyFQwFhssV+/AfI  
wRoMfTGZRN2Rbxy1MpthqrcryKPG2bPb"
```

```
}
```

### Response (Decrypted):

```
{  
  "token": "eyJhbGciOiJIUzUxMiJ9.JzdWliOiIiwiaWF0IjoxNzAwMTEzMjc1LCJleHAiOiE3MDAxMTE0NzUsImF1dGhvcml0aWVzIjoiek9MRV9BRE1JTj9.-  
ToU9E4oX_jVndFrhPLmr0hAb1IUev93vniZHboqwBnj8ye5XC4_VUZIIVC3SXUWylZ6qOzbN  
RTTKnk4ZY2jfg",  
  "message": "token generated successfully",  
  "statusCode": "2000"  
}
```

---

## Verify Udyam API:

**Description:** This API is used to push the Jocata App Data.

### Headers:

--header 'client-id: default'

--header 'Authorization: Bearer

eyJhbGciOiJIUzUxMiJ9.eyJzdWliOiIiwiaWF0IjoxNzA3ODI4NzQ4LCJleHAiOiE3MDc4Mjc5NDgsImF1dGhvcml0aWVzIjoiek9MRV9VU0VSIn0.F5H8DbRaEZFvTAZRglrlyQnIDfEbP7-  
1iUFQ8351fBPuirum9zlQqmAKt2SNc5AYqrG\_cROcnnUhCjq6gEKS8w'

--header 'Content-Type: application/json'

**Note:** Bearer token comes from the token API.

### API Request:

#### Request without encryption:

```
{  
  "ApplicationId": "APPL_001",  
  "UdyamNo": "UDYAM-UP-15-0012120",  
  "Mobile": "7017731522",  
  "PartnerName": "JOCATA"  
}
```

## Request with encryption:

```
{  
  
  "utilsDtls": {  
  
    "sessionKey": "M9AVz1CUN9I/bZVD4UBETI3APLG8XQuhAhoEHZPclabVjN8z04Qrg2  
dab0gKWR4RxWAmuB7jN0cKV8L4EmdcU1n3ED+s/v8y3pA6MOceMg8inRHmU9WRcPatz  
GMjrjGFYrcVnk/rkSCCzlbPUCTx2EMgL0IZUfenC24mFK/YgnPZ+7XnHkR1mTN/VDcEyKs  
U14lpp3h72/dI2CxewZur6dws+SsD9Qb4JdPagZc+d/2GjODRWHIRW4VhJEeUn+M4SDb6LI  
yD9qYzRZCsFcrosMq3y9NfNkaxnwzvNuvzLRC4z70JRK6+BiDC27jtanURCL2yzfCChfvS7d  
eu0b7Vtw==",  
  
    "version": "1.0",  
  
    "timestamp": "29-02-2024 04:36:25",  
  
    "requestId": "4b681efd-1c97-403a-bdc2-d7f2aa0bfcff"  
  
  },  
  
  "payload": "+F9Y3fLZJxo4gmFnOtMBLVtnHj46FxDWPpu5PUdQo9AJj13WpMvxVkYlXq  
/5DFkIn4RvsapCHcgxGHC7M+sa3BMII7Lq58qywxbsc/gMea7pBofIP6Q9tbzWTG9bI/X54z5  
Ti3Rf6QqnotlHOTIQxZAIOpaaqKQkw=="  
  
}
```

## API Response:

### Response (Encrypted):

```
{  
  "utilsDtls": {  
    "sessionKey": "tGDsv02saBcPNNoznmP+qCNHDzAFwpQSKNTQ1A0IXg3L9+MdXRHWk3kasIk32zi9KCjpb/y  
GwS3+ky9KN4WEQ/qtQuzkhTs3ltE8UJwFZe0xiv2EaIa290U0mkMdFlo9ctHtIDQsrnd14J9TcifzZ4/0iMOWiVmDJNv/j  
MaBJCgI0/bF55ltPGeuu0t952pEtcGQsNFIXdDdfti2Nx8MQkeZ/vGgNYn4ZTdW8/J63BrxhNJjsIrJZPFQA1lGkmJHtcl  
tyMnWYKY5jwqjM+s6/9uCiY38DZbITwmI0rDT39VKxdIAH7DOT+VWTZHmXzc/nIZev1lpD8TYXN0zsoW8NA==",  
    "version": "1.0",  
    "timestamp": "01-03-2024 10:27:13",  
    "requestId": "4b681efd-1c97-403a-bdc2-d7f2aa0afcff"  
  },  
  "statusCode": "1000",  
  "statusMsg": "Success",  
  "payload": "a0S2pBP7qLe8i5NqhuxNjDJPZGeRvkUNGdEvQ0LvUshTSw/emv10GeuQZnzn6sMd6LUHtMrg8B6fzo  
1XD+zJ0uUxIrCudaIG1htP8Y3ktpV+qH01y/Sbr21SwFfW8JXw5WkBsBdPPWTm0Z730vm5fNdqh+NRCN+2bU0j5QxuUj/  
nr/myZeFcio6SxmXmV5F3UgGOVB06zkaHbWakmEqoqElXdhesEZytHjlqCApFlogF1SeRB64Q30WJtT8VYjV0v5R0rrZZ  
4Eb5+IiT6//2ew40eHMq6vYh68RYQaF8QqY9r6t2ZfP+08wMNXcRFn7045hE5sL/lGb00P4uA/hcBBVPN7rHp407BimN1  
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```

```
1SwapAvOU3q9aLVV4qXhy84Uav6gYHwadZFG1zUuKmTxxDprPRWfXLU71WryCjz/g5KRrovmVaBxjHvK0b9HkDW/SJLHyK
9Y1PJjFg784rtHPp7HDA+FpfdzKCoyKLHXiOPh/gecAdKBvdW+NZBHZdnmBelvOGfkYatCwcLisU5KAjybt3u4di+UCETS
zxQVTSfuuAshj3oTJ2GyiSJ5cxKbmiLTF11TmDhSbMSEa9gXXz8s8kKBZTcTmPRgZiWk1ax6bU34qVLBzPif0mI09MxBGU
+5amLB6vzSp7CYDSEYqX/I325gOnc/BRWoseg6M+/9kRR8h52Pp7kpeud05629WbBrL7zULl/bZ8PZQJ/aLr6R1QCYpFKA
bd4PJn85YcRJKbG6Qd4YVJRyqXbAi3ePprdEkJW9cgqPtPbn3kU1LMTIMKCkmISjxdmKCYDKyHCBsierd65nu1cHg4h0+M
06SpHB0Bh4mLtxSG5KfJfeL+GBb1X4D8BI17kXQ5ZRRFuI6AReVWcSfTNcaRehTcPPjx1UT9xvOtJiXa9HBouc8qj0VKqI
TUtSefNa450N5y9WAAeSynm0ixwH0SiDM38oNXUlfDYJfwhIYB5+ih7IQ14x1l0cnFc3sDGfCFiuo3P2Rakf3kKGqU1fnt
JMDgw2F8aPntN4RCps1J4N6+YAlleeOE9uM6wdYJpX/WzbieUoAxp00fSqsER3tTGc8rnqwOxi7EFGvtujFZBr3SnsZVicP
rRZ8sW8c2Tswk6n9T6LiACBD4b8muN4WL0UwULvn7WP1bD1/zcDHmYT6r0BDnikaveJSW6Ewi3VkbdTwJaNVZ2nUtNFI39
RI1WDJWzNlvhP/Z5G/BXJMLaCfFeYJfabwLqXPJ3o8YqPjJdS4h20B1+o9t6kygL56itR13kGSSLZgUHD+JEIqwPB6J2v
AyZ0cqijYmMT5RpQ1bspjQfXDS5daKVC2Io0oCeCFJkk38Yq4gDXu+sZrP3rEQqz4VCCFw=="
}
```

### Response (Decrypted):

```
{
  "EnterpriseName": "M/S MAALIK INDUSTRIES",
  "PanNo": "AAFFM0472M",
  "OfficialAddress": "MAALIK INDUSTRIES, TOWN RICHHA, Jahanabad Road, MAALIK INDUSTRIES, Ric
hha, Baheri",
  "LG_ST_Code": 9,
  "State": "UTTAR PRADESH",
  "LG_DT_Code": 130,
  "District": "BAREILLY",
  "Pincode": "243201",
  "EnterpriseType": "Micro",
  "IncorporationDate": "05/03/1987"
}
```

## Encryption Decryption Logic:

### ➤ ENCRYPTION LOGIC:

1. Generate a random session key.
2. Use AES 128-bit Symmetric Encryption algorithm to encrypt the data with the randomly generated session key.
  - a. Message Digest – SHA-256
  - b. Encryption Type- AES128
  - c. Cipher to be used- AES/GCM/NoPadding
  - d. Base64 Encoded
3. Encrypt Session key using RSA with the public key of SIDBI and place the encrypted key in SessionKey tag.

- Encryption Type- RSA
- Cipher to be used- RSA/None/OAEPWithSHA1AndMGF1Padding
- Base64 Encoded

4. Send the same request to Authentication Token Service.

➤ **DECRYPTION LOGIC:**

1. Decrypt the randomly generated session key with the client's private key using RSA algorithm.

- a. Base64 Decoded
- b. Encryption Type- RSA
- c. Cipher to be used- - RSA/None/OAEPWithSHA1AndMGF1Padding, BC

2. The decrypted session key will then be used to decrypt the value using AES 128 algorithm.

- a. Base64 Decoded
- b. Message Digest – SHA-256
- c. Encryption Type- AES128
- d. Cipher to be used- AES/GCM/NoPadding